

**NOAA Climate and Societal Interactions Program –  
CSI-Coasts  
FY 2011 Information Sheet**

The NOAA Climate and Societal Interactions program (CSI), formerly the Climate Assessment and Services Division of CPO, provides national leadership in developing interdisciplinary science and services, including assessments, for application in climate-sensitive sectors and regions. NOAA CSI is designed to support and advance the evolving NOAA Climate Service effort (<http://www.noaa.gov/climate.html>). The goals of the CSI program are: 1) identification and articulation of user-community requirements in multiple sectors, initially with regard to water resources and the coastal zone then branching to related sectors; 2) research and development of innovative and broadly applicable approaches to support decision-making, especially for risk characterization, both through a broad network of regionally scoped, long-term efforts and stakeholder-specific efforts; and 3) promotion of the transfer of knowledge, tools, and products across climate service development efforts (within NOAA, across the federal government, nationally, and internationally).

CSI-Coasts, formerly a part of the Sectoral Applications Research Program (SARP), addresses the needs of a specific stakeholder or set of stakeholders grappling with pressing climate-related issues in the coastal zone. CSI-Coasts funds interdisciplinary teams of researchers and decision makers over a limited time span, but the projects advance decision making by reducing explicit vulnerabilities to climate variability and change in coastal areas. CSI-Coasts, in collaboration with CSI-Regions, supports initiatives to assist coastal managers that are coping with impacts of sea-level rise within the U.S. through research, tool development and decision support.

**CSI- Coasts**

CSI-Coasts (formerly known as SARP- the Sectoral Applications Research Program) is designed to support an interdisciplinary and applicable knowledge base and mechanisms for the creation, dissemination, and exchange of climate-related research, information, and decision support resources. These are critical for understanding and addressing resource management challenges and enhancing the capacity of key socio-economic sectors and systems to respond to and plan for a changing climate. The overarching objectives of CSI-Coasts are:

- Provide a better understanding of the interactions and vulnerabilities of human and environmental systems in the face of a changing climate.
- Improve insight and understanding related to resource managers and planners' needs and obstacles they face in coping with climate variability and change, for an increasingly effective and relevant climate service.
- Produce cutting-edge knowledge, tools, methodologies, etc., for decision makers' use in vulnerability analysis, planning, adaptation, mitigation, etc.
- Advance the infusion of climate information, including information on climate risks and uncertainty, in decision-making processes on various scales.

- Promote partnerships between the scientific and sector-specific decision-making communities for continued use and understanding of climate forecast information.

## **Target Audience**

CSI-Coasts funds projects designed to respond to the climate related information needs of a specific group of coastal managers, planners, or decision makers and the public. Unless otherwise noted, projects may have a geographically defined scope within the US or overseas where the impacts of climate are acute and/or significant and relevant to NOAA interests.

## **Sectors/Issues**

CSI-Coasts supports applications research on the influence of climate variability and change on the coastal built and natural environment where communities face a complex suite of interrelated issues, which can be compounded by climate variability and change. CSI-Coasts is increasingly interested in exploring connections between the coastal and marine environments, primarily through collaborations with NOAA's National Marine Fisheries Service (NMFS) and National Ocean Service (NOS). The exact nature of the research activities and partnerships developed for each project is continually influenced by information needs, partners, and state of readiness identified by stakeholders within a given sector.

## **Teams**

Multidisciplinary teams of investigators are often best suited for addressing the complex issues related to climate, society and enhanced adaptation through the use of science and technology. Thus, CSI-Coasts usually funds projects consisting of research teams including social and natural scientists paired with, in many cases, decision makers, stakeholders, and resource managers located in the study region. We encourage cost/effort sharing between partners; while this is not required, any in-kind time should be reported within the proposal.

## **Partners**

CSI-Coasts encourages partnerships and collaborations between researchers and critical decision-making institutions in the region of study including NGOs, boundary organizations, extension services, state and local governments, representative private sector organizations, NOAA, and other federal agencies.

## **Outcomes**

CSI-Coasts projects are expected to produce specific products and information services that enhance response and coping capacity of the target audience and have a clear plan for dissemination of the findings. Examples include:

- Tools, methodologies, scenarios, models, etc that enhance the capacity of coastal decisions makers to integrate climate information into resource management and planning
- Assessment Services (e.g. vulnerability and impacts assessments, assessments of adaptation scenarios and options, socioeconomic assessments, etc.)
- Outreach, communication, and education resources targeted towards a specific audience (e.g. general public, state officials, resource managers)
- Workshops, surveys, focus groups, and ongoing dialogue with coastal decision makers
- White papers or reports on climate impacts and adaptation issues for resource managers and planners
- Analyses and communication of uncertainties surrounding climate predictions and projections
- Peer-reviewed science papers related to climate impacts and adaptation issues
- Newsletters containing climate impacts/prediction information and articles on climate impact issues of significance to coastal decision makers
- Presentations on research results to resource managers, planners and scientists

Project teams should be able to speak to the transferability of the project outputs to other regions. CSI-Coasts also encourages project teams that have already developed a product to explore opportunities provided by CSI-Transitions (described below) as an additional avenue for transferring results of projects to an operational setting.

## Reference Information

General information on CSI-Coasts (formerly SARP) can be found at:  
[http://www.climate.noaa.gov/cpo\\_pa/sarp](http://www.climate.noaa.gov/cpo_pa/sarp).

See Climate Program Announcement for FY11 for details (**expected to be posted in early July**).

- SARP: [http://www.climate.noaa.gov/cpo\\_pa/SARP/](http://www.climate.noaa.gov/cpo_pa/SARP/)
- Regional Integrated Sciences and Assessments:  
[http://www.climate.noaa.gov/cpo\\_pa/risa/](http://www.climate.noaa.gov/cpo_pa/risa/)
- Transition of Research Applications to Climate Services:  
[http://www.climate.noaa.gov/cpo\\_pa/nctp/](http://www.climate.noaa.gov/cpo_pa/nctp/)
- U.S. Climate Change Science Program: <http://www.climatechange.gov/default.php>
- NWS Climate Services: <http://www.weather.gov/os/csd/index.php>
- NIDIS: <http://www.drought.gov/>

For more information, please see the following references related to CSI-Coasts (formerly SARP):

- IPCC, 2007: Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Avery, M.

Tignor and H.L. Miller (eds.)). Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

- Jacobs, K.L., (2002), Connecting Science, Policy and Decision-Making: A Handbook for Researchers and Science Agencies, National Oceanic and Atmospheric Administration, Office of Global Programs, Silver Spring, Maryland.
- National Research Council. 1999. Making Climate Forecasts Matter. National Academy Press, Washington, D.C.
- National Research Council. 2009. Informing Decisions in A Changing Climate. National Academies, Washington, D.C.
- National Research Council. 2009. Restructuring Federal Climate Research to Meet the Challenges of Climate Change. National Academies, Washington, D.C.
- U.S. Climate Change Science Program, 2009. Synthesis and Assessment Product 4.1 Coastal Sensitivity to Sea-Level Rise: A Focus on the Mid-Atlantic Region
- U.S. Climate Change Science Program, 2009. Synthesis and Assessment Product 4.2 Thresholds of Climate Change in Ecosystems

### **FY2011 Priorities for CSI-Coasts**

For FY 11, CSI-Coasts is soliciting proposals in three areas: a) coastal resource management in a changing climate, particularly with regard to coastal ecosystems, b) sea level rise in the context of multiple stressors, and c) projects by one or more RISA teams, in collaboration with regional partners, investigating regional climate impacts and adaptation in the coastal sector (e.g. ocean acidification on the Pacific coast). CSI - Coasts is particularly interested in supporting projects that connect with NOAA's coastal programs and their priorities (e.g. Coastal Zone Management Program, National Marine Sanctuaries, Coastal Services Center, Sea Grant, etc.).

With increased awareness of climate and related impacts, there has been an associated demand for climate forecasts and information. Requests from coastal resource managers differ in their specificity and sophistication of the knowledge of current and future climate information products and potential product development. As a result, this year we are again funding projects by investigators who intend to work with a specific community of decision makers (e.g., coastal real estate agents, coastal resource managers, etc.), geographic entity (e.g., barrier islands along a specific coast, etc.), or even an administrative unit (e.g., towns along a coastline, Native American Nation, state, etc.).

In addition, CSI-Coasts is also interested in supporting individual projects that address one or more of the following topics at the appropriate spatial and temporal scales.<sup>1</sup>

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<sup>1</sup> Note: Extensive modeling of the physical and natural system is more appropriately handled through climate science programs both within the other sections of NOAA's Climate Program Office and other agencies.

- Identify the key science needs for adaptation factoring in their current accessibility to and use of climate forecasts, projections, and information products
- Identify and assess key vulnerabilities and appropriate adaptive responses to changing climate conditions faced by the community
- Identify/create methodology to determine costs/benefits of impacts as well as costs/benefits of adaptation options or enhancing preparedness. This could include, for example: indirect or secondary economic impacts, development of socioeconomic baselines and vulnerability assessments, tools for generating risk and adaptation scenarios, assessment and representation of uncertainties, and/or valuation of the impacts of possible losses on society (e.g., impacts to ecosystems)
- Develop risk analysis and management approaches as tools and guidelines for adaptation for decision-makers

### *Recommended Proposal Components*

Successful proposals show that they are building on what is already known from the published literature about the proposed topic, prove that the PIs have a comprehension of the topic, and that their proposed work augments the existing science.

Successful proposals: 1) define (in a sentence or two) in the abstract or introduction the problem they are addressing; 2) describe in extensive detail the proposed methodology and how it can be accomplished; 3) clearly define expected outcomes; 4) provide a descriptive benefit analysis of the outcome; 5) describe their plan to measure the success of the project's outcome; 6) describe a dissemination plan for the study's results; 7) provide a description of a sector's readiness and need for climate information; 8) outline how the results of their work could be used in other areas/arenas or sectors and propose a mechanism for transferring the knowledge there; 9) include an evaluation component at the end of the project (and/or earlier if appropriate) that involves stakeholders; 10) provide an explanation of the roles of the investigators, how the team interacts, and integrates the multiple components; and 11) show evidence of stakeholder support such as cost-sharing (not required), letters of support confirming commitment to participation, in-kind time (Note: CSI-Coasts expects in-kind participation. Please list investigators not requesting funds for salaries in the proposal and budget along with their estimated time of commitment and duties). Finally, we highly encourage projects to include a member of the community that would be involved in the project as a co-PI.

Applicants whose proposals are chosen for funding are expected to undertake an ongoing dialogue with NOAA's Climate Program Office and required to report findings and communicate with CSI-Coasts throughout the lifetime of the grant. Investigators are required to provide annual progress reports in a prescribed format that highlight scientific

progress as well as linkages to practical applications (see the “Community Corner” section of the website ([http://www.climate.noaa.gov/cpo\\_pa/sarp/](http://www.climate.noaa.gov/cpo_pa/sarp/))).

Awardees would be required to report findings and communicate with CSI-Coasts throughout the lifetime of the grant. In addition to the prescribed progress report investigators are expected to provide periodic updates on the project. This may consist of a Principal Investigators’ meeting of funded projects to discuss common questions and frameworks to be addressed in the new research projects and periodic teleconferences with other Principal Investigators funded by CSI-Coasts as well as responses to periodic updates on the project status made throughout the term of the grant. We encourage creative methods of conveying the results of work done under the grant or more general knowledge about climate-human interactions to the broader community of researchers and decision makers. For example, information can be displayed on websites, in non-scientific newsletters, on CDs, on short video documentaries that can be copied and disseminated, etc.

Interested applicants for all competitions are highly encouraged to submit a 2-page Letter of Intent (LOI) outlining plans for a RISA by May 26, 2010 to [Zachary.Zhao@noaa.gov](mailto:Zachary.Zhao@noaa.gov).

CSI-Coasts intends to fund 3-5 projects with up to \$300,000 per project over 1-2 years. Proposals being offered funding from the FY11 review process are announced as soon as they have been vetted through the grant awarding process.

Projects that have been funded through CSI-Coasts (or its predecessor programs including SARP) are listed on our website along with associated annual and final reports ([www.climate.noaa.gov/cpo\\_pa/SARP](http://www.climate.noaa.gov/cpo_pa/SARP)).

For additional information please contact:

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